

# Technical Data

## Standard Pipe Inside Diameter In Inches

Nominal Size	Steel, PVC, Sch. 40, CPVC	Steel, PVC, ABS, Sch. 80, CPVC	SDR 26	ASTM F-679(T-1)	Vitrified Clay	Ductile Class 50	Ductile Class 51	Ductile Class 52	Ductile Class 53	Ductile Class 54	Ductile Class 55	Ductile Class 56	Force per Foot of Head		
													Pipe I.D. in	mm	Pounds using .434psi/ft hd
3"	3.068	2.900			3.000-0.187		3.460	3.400	3.340	3.280	3.220	3.160	3	7.62	3.07
3 1/2"	3.548	3.364											3.5	8.89	4.17
4"	4.026	3.826			4.000-0.187		4.280	4.220	4.160	4.100	4.040	3.980	4	10.16	5.45
5"	5.047	4.813											5	12.70	8.52
6"	6.065	5.761	5.764 Ave/5.612 Base		6.000-0.250	6.400	6.340	6.280	6.220	6.160	6.100	6.040	6	15.24	12.27
8"	7.981	7.625	7.715 Ave/7.488 Base		8.000-0.310	8.510	8.450	8.390	8.330	8.270	8.210	8.150	8	20.32	21.80
10"	10.020	9.564	9.664 Ave/9.342 Base		10.000-0.380	10.520	10.460	10.400	10.340	10.280	10.220	10.160	10	25.40	34.07
12"	11.938	11.376	11.480 Ave/11.102 Base		12.000-0.440	12.580	12.520	12.460	12.400	12.340	12.280	12.220	12	30.48	49.06
14"	13.124	12.500				14.640	14.580	14.520	14.460	14.400	14.340	14.280	14	35.56	66.78
15"			14.503 Ave/13.575 Base		15.000-0.560								15	38.10	76.66
16"	15.000	14.314				16.720	16.660	16.600	16.540	16.480	16.420	16.360	16	40.64	87.22
18"	16.876	16.126		17.569 Ave/16.569 Base	18.000-0.680	18.800	18.740	18.680	18.620	18.560	18.500	18.440	18	45.72	110.38
20"	18.814	17.938				20.880	20.820	20.760	20.700	20.640	20.580	20.520	20	50.80	136.28
21"				20.707 Ave/20.009 Base	21.000-0.810								21	53.34	150.24
22"		19.750											22	55.88	164.90
24"	22.626	21.564		23.296 Ave/22.480 Base	24.000-0.940	25.040	24.980	24.860	24.800	24.740	24.680		24	60.96	196.24
30"						31.220	31.140	31.060	30.980	30.900	30.820	30.740	30	76.20	306.62
36"						37.440	37.340	37.240	37.140	37.040	36.940	36.840	36	91.44	441.53
42"	40.500					43.560	43.440	43.320	43.200	43.080	42.960	42.840	42	106.68	600.98
48"						49.780	49.640	49.500	49.360	49.220	49.080	48.940	48	121.92	784.95
54"						55.960	55.800	55.640	55.480	55.320	55.160	55.000	54	137.16	993.45
<b>CONVERSION CHART</b>						<b>PRESSURE CONVERSION</b>						60	152.40	1,226.48	
Bars	x	14.5	=	Pound/square inch	<b>PSI</b>	<b>FEET OF HEAD</b>		<b>PSI</b>	<b>FEET OF HEAD</b>		66	167.64	1,484.05		
Cubic feet	x	1728	=	Cubic inches	1	2.31		17	39.25		72	182.88	1,766.14		
Cubic feet	x	7.48052	=	Gallons	2	4.62		18	41.56		84	213.36	2,403.91		
Feet	x	0.3048	=	Meters	3	6.93		19	43.87		96	243.84	3,139.80		
Feet of water	x	0.8825	=	Inches of mercury	4	9.24		20	46.18		108	274.32	3,973.81		
Feet of water	x	0.4335	=	Pounds/square inch	5	11.55		25	57.73		120	304.80	4,905.94		
Inches	x	25.4	=	Millimeters	6	13.85		30	69.27		126	320.04	5,408.79		
Inches of mercury	x	1.133	=	Feet of water	7	16.16		35	80.82		132	335.28	5,936.18		
Inches of mercury	x	0.4912	=	Pounds/square inch	8	18.47		40	92.36		138	350.52	6,488.10		
Kilograms	x	2.2046	=	Pounds	9	20.78		45	103.91		144	365.76	7,064.55		
Meters	x	3.281	=	Feet	10	23.09		50	115.45		150	381.00	7,665.53		
Millimeters	x	0.03937	=	Inches	11	25.40		60	138.54		156	396.24	8,291.03		
Pounds/square inch (psi)	x	2.307	=	Feet of water	12	27.71		70	161.63		162	411.48	8,941.07		
Pounds/square inch (psi)	x	2.036	=	Inches of mercury	13	30.02		80	184.72		168	426.72	9,615.63		
Square inch area of a round pipe = $\pi R^2$ (3.14 x radius <sup>2</sup> )					Cu.Ft. Air per Cu.Ft. Volume	14	32.33		90	207.81		174	441.96	10,314.73	
Pounds of Force = PSI x Square inch area					Gauge PSI + 14.7	15	34.64		100	230.90		180	457.20	11,038.36	
1% slope of grade = 1' rise in 100' distance					14.7	16	36.94		110	253.99		186	472.44	11,786.51	

Petersen Products Company

PO Box 340 \* 421 Wheeler Avenue, Fredonia, WI 53021-0340

PHONE 800-926-1926 OR 262-692-2416 FAX 800-669-1434 OR 262-692-2418

www.pipeplug.com